

TRAINING AN AIR FORCE PILOT

*Controversial Subject of Bad-weather
Service Flying Raised at R.U.S.I.
Lecture*

THE much discussed question of training R.A.F. pilots in flying through bad weather was raised during a discussion at the Royal United Service Institution on Wednesday of last week.

It is a matter which has caused serious misgivings in many quarters, and the replies of the lecturer, Air Vice-Marshall L. A. Pattinson, and of the chairman, Air Marshal W. G. S. Mitchell, were not completely reassuring. The former pointed out that, from the viewpoint of training, flying by instruments under a hood is a substitute for flying through bad weather, while the latter admitted that civil commercial pilots were on the whole better at bad-weather flying than R.A.F. pilots because the former were more experienced. There was also slow delivery of certain instruments. Both anticipated an improvement in the future.

The occasion was a lecture on the training of an Air Force pilot, a subject with which many readers of *Flight* are well acquainted, but which was evidently novel to officers of the Navy and Army. A.V.-M. Pattinson, who commands No. 23 (Training) Group, described the main differences between the training system before the expansion and the new system which began towards the end of 1935. He confined himself to the cases of university entrants, short-service officers, and airman pilots, all of whom pass through R.A.F. flying training schools. Under the old system they all spent twelve months at a F.T.S., but had to receive further training on joining their squadrons.

The Two Systems

The reasons for introducing a new system were two: (1) To let the squadrons concentrate on squadron work, and (2) to meet the demand for a greater output of pilots. He described how civil schools were instituted, at which basic flying training and ground instruction were given. The discipline at these schools had to be strict, but life was on a civilian basis and the pupils did not wear uniform. These schools also gave elementary instruction in instrument flying and simple cross-country work. Pupils spent eight weeks in summer and ten weeks in winter at these schools.

Then the pupils went to the depot at Uxbridge for a fortnight, where they were taught drill and service discipline, and they got their uniform while there.

The next stage was at a flying training school where the pupils first went through the intermediate course. In this course, which lasted for thirteen weeks in summer and fifteen in winter, they learnt to fly Service-type air-



craft, did advanced instrument flying (including navigation under the hood), and fairly long cross-country flights. They also had advanced ground instruction and had to pass examinations. At the end of this course they ought to be able to fly automatically, and to treat flying as a means to an end, and not as an end in itself. On completing this course the pilots received their "wings."

After the vacation they returned to the F.T.S. for an advanced course, again of thirteen weeks in summer and fifteen in winter. This was a course in applied flying, i.e., in R.A.F. air work, including live bombing and air gunnery at an armament training camp.

In all the new training course took ten months as against twelve under the old system. Yet whereas formerly a pilot used to average 50 hours' solo on Service types, he now averaged 70 hours. One of the great changes, however, was that the number of flying hours was no longer the criterion; pilots were now judged by the number of exercises they had carried out and their proficiency at each.

During the last stage, in the advanced training squadron at the F.T.S., pilots were paired, with the exception of those destined for single-seater fighters, and the same two usually flew together, taking turns to be pilot and observer. This was considered very useful training.

As regards specialisation, the schools would like to train all pilots in the same way, but the operating commands wished for specialisation. A compromise had been made, and when joining a flying training school the pilots were divided into three groups: (1) Heavy bombers, (2) light bombers, medium bombers, torpedo bombers, and army co-operation, and (3) fighters. Twin-engined training machines had lately been introduced into the F.T. schools. Pilots destined for general reconnaissance, army co-operation and other specialist branches did further courses after leaving their F.T.S. In reply to a question, the lecturer said that Fleet Air Arm pilots were trained at Leuchars, where there was a catapult and a dummy deck. Some of them also did a course on floatplanes on the south coast.

Despite insistence on economic use of flying time, the lecturer admitted that there was considerable pressure at the F.T. schools, and, though they had met all demands, it was hoped that the pressure would relax when expansion was complete.

THE R.Ae.S. RECEPTION

SOME very interesting and instructive films will form part of the attractions offered at the Royal Aeronautical Society's annual reception, which is to be held in the Aeronautical Section of the Science Museum, South Kensington, next Wednesday, January 19.

Those interested in the tricycle undercarriage (and who is not?) will certainly take the opportunity to witness the film of one of the new American light aeroplanes so fitted "doing its stuff." Helicopters and gyroplanes (including paddle planes) will figure in the programme, and the audiences will be able to see how the "Roadable Autogiro" behaves aloft and afloat. It does not, as one wag thought, taxi up to the traffic lights and jump over them if they show red, but it is almost as good a motor car as it is aircraft.

In this country we have not done much with steam-driven aeroplanes since Maxim's day, and the film showing the take-off and flight of the American Bessler steam aeroplane is sure to attract attention.

In addition to the films there will be television demonstrations (not, one fears, from aircraft), so that apart from the reception and the pleasure of meeting people, there will be plenty to interest.

It might be pointed out that non-members of the R.Ae.S. may attend the reception, which begins at 8.30, and that the price of tickets, obtainable from the secretary of the R.Ae.S., 7, Albemarle Street, London, W.1, is 5s. each, inclusive of buffet. The occasion is a formal one, and evening dress and decorations will be worn.